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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/053,650	04/02/1998	KWANG CHEOL JOO	03586.0013	1592

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EXAMINER	
BROWN, RUEBEN M	

ART UNIT	PAPER NUMBER
2611	8

DATE MAILED: 05/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

HG

Office Action Summary	Application No. 09/053,650	Applicant(s) JOO, ET AL	
	Examiner Brown M. Reuben	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *22 March 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-29 and 31-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-29 and 31-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/22/02 have been fully considered but they are not persuasive. Applicant argues on page 4 that, "the examiner suggests that Metz at col. 36, lines 58-65 teaches storing a predetermined value corresponding to the stored value". Since this argument is found in the paragraph directly succeeding the paragraph, with which applicant begins a characterization of amended claim 27, it is assumed that applicant's arguments associated with the above statement, are with respect to at least claim 27. Therefore, examiner does not understand the point of applicant's argument, since nowhere in the previous rejection of claim 27, does the examiner cite or discuss the referenced passage in Metz, col. 36, lines 58-65.

Thus the examiner will discuss applicant's arguments with respect to the claims that examiner did cite the referenced passage, i.e. claims 28, 34, 39, 45 & 49. The instant claims recite, wherein the broadcast signal includes a PID in order to identify the 'type of information of the broadcast signal' or 'new program' or 'control program'. Metz at col. 11, lines 40-67 & col. 36, lines 58-65 teach the very well known standard MPEG technique of assigning each packet in a transmission stream a PID value. It is furthermore discussed that the PID value identifies the instant packet and the type of information content, such as audio, video, related data, etc. Moreover the data in a program map table identifies the PID values associated with a particular

downloaded operating system. Therefore the above-cited passages in a Metz, clearly read on claims 28, 34, 39, 45 & 49.

However, applicant goes on to discuss on page 4, why the above referenced passage in Metz does not read on claim 27, because of various features. Nevertheless, examiner asserts that the disclosure of Metz anticipates amended claim 27 & claim 33. In particular, the operating system of Metz reads on the claimed control program, which controls the operation of a video program signal, see col. 4, lines 7-13. Metz teaches storing the operating system at the local STB, col. 8, lines 12-15 & col. 10, lines 1-4.

Metz teaches storing the version number of the operating system and as discussed above, the actual operating system itself, see col. 5, lines 41-45 & col. 9, lines 55-62. Finally, Metz clearly discloses updating the control program in the storage element based on control information and the predetermined version number, Abstract & col. 9, lines 55-67 thru col. 10, lines 1-4.

In light of examiner's above discussion, the rejection of the instant claims as being anticipated by Metz is maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 27-29 & 31-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Metz, (U.S. Pat # 5,666,293).

Considering claim 27, the amended claimed first domain for storing a version number of the control program is met by the discussion of Metz, storing the version number of the current operating system in STB memory, (col. 5, lines 41-45; col. 9, lines 58-60 & col. 36, lines 29-34).

The claimed second domain for storing a downloaded program is broad enough to read on the storage of either a downloaded application program or operating system, col. 4, lines 11-19; col. 5, lines 60-65 & col. 6, lines 55-58. The claimed domain for storing a predetermined version number of a downloaded program reads on the operation of Metz, since in order to check the version number of an incoming operating system, against the version number of a currently running operating system, the system inherently at least momentarily stores the version number of the instant incoming operating system, see col. 9, lines 55-60 & Fig. 9, step 54.

As for the claimed third domain for storing the control program, it is not clear if applicant is referring to the "downloaded" [control] program, associated with the second domain or the [currently running] control program, associated with the first domain, emphasis added. Nevertheless, Metz discloses that when the version number of the incoming operating system does not match the version number of the current operating system, that the incoming operating system is extracted from the received transport stream and stored in RAM, col. 10, lines 1-9 & col. 17, lines 45-56. Once the system confirms that there are no errors in the downloaded operating system, the instant upgrade is transferred to non-volatile memory. The above passage reads on the claimed third domain for storing the control program.

The additionally claimed feature of the microcontroller updating the control program in the storage element on the basis of the control information signal and the predetermined version is the very essence of Metz, and is therefore anticipated, (Abstract; col. 5, lines 47-50 col. 9, lines 65-67 & col. 17, lines 39-50).

Considering claims 28, 34, 39, 45 & 49, wherein the broadcast signal includes a PID in order to identify the type of information of the broadcast signal, Metz teaches such a feature, col. 14, lines 18-35 & col. 36, lines 54-56.

Considering claims 29, 35, 40, & 50, the DET 102 of Metz includes RAM 122, for temporarily storing downloaded software, col. 10, lines 1-15.

Considering claims 31, 36, 41, 44 & 51, Metz also utilizes flash memory, col. 8, lines 9-12 & 17, lines 44-46.

Considering claim 32, the claimed processor for separating the control information signal from the broadcast signal reads on the disclosure of Metz, which teaches extracting the downloaded program from the transmission stream, col. 10, lines 1-5.

Considering claim 33, the claimed elements of a downloading apparatus, which corresponds with subject matter mentioned above in the rejection of claim 27, are likewise analyzed. The claimed first storage element, which temporarily stores control information representing a new control program, reads on Metz, col. 10, lines 1-15; col. 17, lines 50-55 & col. 38, lines 10-19. The above passages teach that the recently downloaded operating system is initially stored in RAM, when the downloading and error checking is complete, the operating system is transferred to a non-volatile memory, which reads on the claimed second memory

element which stores the control program. The claimed controller that replaces the control program in the second storage element with the new control program also reads on Metz, col. 10, lines 1-15 & col. 38, lines 14-50.

Considering claim 37, the claimed third storage element reads on ROM, disclosed in Metz.

Considering claim 38, the claimed method for downloading a control program from a broadcast signal comprising storing a control program in a first domain of memory, reads on Metz, col. 38, lines 21-26, which teaches that the upgraded operating system may be stored in ROM 115, also see col. 37, lines 65-67 thru col. 38, line 1. The claimed method of storing a predetermined value corresponding to the stored control program in a second domain reads on col. 36, lines 58-65.

The claimed method of selecting a name of a control program to be downloaded and separating the control program corresponding with the selected program name, reads on identifying the PID of the file, taught in Metz, col. 36,lines 54-60.

The claimed method of replacing the stored control program with the separated control program is met by Metz, col. 38, lines 14-28. The claimed method of replacing the stored

predetermined value with a version number corresponding to the replaced control program is inherent in Metz, col. 5, lines 40-51; col. 9, lines 55-65.

Considering claim 42, in Metz the system downloads a particular upgraded operating system if its version is a certain value, otherwise the system continues to use the previously stored operating system, col. 5, lines 38-50; col. 9,lines 50-67 thru col. 10, lines 1-15 & col. 36, lines 28-55.

Considering claim 43, the claimed method steps correspond with subject matter mentioned above in the rejection of claim 38, and are likewise analyzed.

Considering claim 46, Metz discloses storage space for storing a version number of the control program, col. 5, lines 40-45 & col. 9, lines 55-60. Metz also discloses storing and utilizing a downloading program, col. 9, lines 20-54. Moreover Metz teaches that the downloaded control program is stored in the memory of the DET 102, col. 8, lines 12-14 & col. 10, lines 1-5.

Considering claim 47, the claimed method steps correspond with subject matter mentioned above in the rejection of claim 38, and are likewise analyzed.

Considering claims 48 & 52, the claimed process of recognizing an abnormal situation and processing the control program in the memory, reads on the operation of Metz, col. 38, lines

40-52. Metz discloses that in the event of a failure to correctly write the operating system in the RAM 122, the system attempts to reload the operating system into flash memory 121.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:
(703) 872-9314, (for formal communications intended for entry)
Or:
(703) 872-9314 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brown M. Reuben whose telephone number is (703) 305-2399. The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown

ANDREW FAILE
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